

## UNITED STATES PATENT OFFICE.

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## CONCEALED HINGE.

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This invention relates particularly to a hinge for connecting table leaf sections, although of course it may have a more general use wherever applicable. Among the objects of the invention are: to provide a hinge made entirely of metal stampings; to provide a hinge of this kind which may be secured to the adjacent ends of two leaves to be connected which will make them abut closely and render the hinge invisible; and to provide a hinge of this kind in which a projection of one portion of the hinge will act as a levelling support for the two leaf sections connected by the hinge.

In the accompanying drawing Fig. 1 is a side elevation showing the hinge in folding or closed position; Fig. 2 is a side elevation showing the hinge in open or extended position; Fig. 3 is a plan view of the hinge in open position; and Fig. 4 is a sectional view taken on the line 4-4 of Fig. 3.

The hinge proper comprises two members 1 and 2 somewhat similar and adapted to be secured by screws 3 to the adjacent edges of the hinged members or leaves 4. The hinge members 1 and 2 are angular in cross section, as shown more clearly in Fig. 4, and has an upstanding portion 5 or 6 which is usually disposed at the side of one of the leaves to be connected, the base or other portion being secured to the bottom of the leaf. The leaf itself may be cut away or countersunk to accommodate the base or upstanding part of the hinge so that the hinge parts will be flush with the side and end of the leaves. The upstanding parts 5 and 6 are inclined upwardly and outwardly toward their adjacent edges, as shown in Fig. 4, and in these parts are slots 7 and 8.

From the base of the hinge part 2 there is a projection 9 which extends into a corresponding recess 10 in the other hinge part 1, and also extends across the meeting line between the hinge parts and between the leaves to which the hinge parts are attached. The object of this projection 9 is to evenly support the two leaf sections 4 when they are in open position so that they will be flush on top when they are in open position, even though the hinge parts themselves may not be exactly or accurately positioned.

In order to connect the hinged parts 1 and 2 there are two similar levers 11 and 12, one pivotally connected at one end to the extremity of the upstanding portion 5 and having headed projections at its other end

movable in the slots 8 of the other hinge member, and the other lever 12 being pivoted to the upstanding portion 6 of the hinge member 2 and having its other end with a headed projection slidable in the slot 7 of the hinge member 1. These levers 11 and 12 are curved substantially in the form of a semi-circle and cross each other at an angle where they have a common pivot 13. The result is that when these leaves 11 and 12 are in one position, as limited by the slots 7 and 8, the hinge members are spaced apart, as shown in Fig. 1, and when they are moved so that they are at the other ends of the slots 7 and 8, the hinge members 1 and 2 are closely abutting with the leaf sections 4 in alinement, as shown in Fig. 2. In the first position the hinge members project from the ends of the leaf members, and in the second position they project below the junction of the leaf members. At no time do they engage the abutting ends of the tops of the leaf sections and when in extended form, as shown by Fig. 2, the hinges and the parts thereof are invisible from the top of the leaf.

These hinge parts are made entirely of stamped sheet metal and are preferably formed with rounded raised portions 14 surrounding the screw holes which make countersunk portions for the screw heads. At the bending line between the base and the upstanding portion there is a rounded groove 15 instead of a sharp bend which strengthens the hinge member and prevents cracking or breaking the hinge member in its formation. One of the hinge members is formed with a projection 16 to which the lever 11 is pivoted and the other end of the lever is formed with an offset 17 so that the levers 11 and 12 will be in proper position and relation to pass each other.

With this construction it is obvious that table leaf sections or any two members may be connected for a hinging movement of approximately 180° and that when the members are in open position the hinge will be entirely invisible from the top thereof, all of the parts being covered or concealed by being flush with the surfaces, or being inserted in recesses or slots made in the under sides of the leaf sections for the purpose of receiving the hinge parts.

I claim:

1. The combination with a pair of sectionally angular hinge members adapted for